Appln. No.: 10/540,785
Amendment Dated September 29, 2008
Reply to Office Action of July 2, 2008

SUGI-102US

Remarks/Arguments:

Applicant thanks the Examiner for the telephone interview on August 19, 2008. During the interview, it was agreed that because the Pingel reference requires that there be an integer number of pixels per grid (col. 3, lines 27-39) and because the invention as claimed at least in claims 4, 5, 10 and 11 require that there be a non-integer number of pixels per grid. In view of this, the Examiner asserted that the subject invention as defined by claims 4, 5, 10 and 11 appears to overcome Pingel.

Claims 1, 2, 4, 5, 7, 8, 10 and 11 are pending in the above-identified application.

Claims 4, 5, 10 and 11 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Pingel et al. Applicant respectfully requests reconsideration of this rejection. In particular, Pingel et al. do not disclose or suggest,

> a step of pick-up an image of a grid pattern having an array having a bright portion and a dark portion with a constant pitch and a constant width by using an image pickup device including a CCD pixel array and enabling $4n\pm a$ CCD pixels correspond to n grids, where n and a are integers greater than zero and a is less than or equal to n/10, thereby generating a moiré fringes, upon pick-up the image of the grid pattern on said image pickup device,

as required by claim 4. Claims 5, 10 and 11 include similar recitations.

As set forth in the Office Action, Pingel et al. at best describe a device in which a and n are equal. As set forth in claims 4, 5, 10 and 11, however, a and n are not equal. Indeed, a is limited to be an integer that is less than or equal to n/10. This limitation on the relative values of a and n is not supported by Pingel et al. At col. 3, lines 27-39, Pingel discloses that there are three pixels per grid. At col. 4, lines 50-57, Pingel et al. indicate that the number of pixels per grid may be four or five. At col. 3, lines 27-31, Pingel et al. indicate that the invention preferably provides for an integer number of pixels per grid.

In Applicants invention as defined by claims 4, 5, 10 and 11. For example, if n=10 then a must be 1. This would result in 41 or 39 pixels for 10 grids. The number of pixels per grid is either 4.1 of 3.9. Neither of these is an integral number. Thus, Pingel et al. teach away from Applicant's invention. Because Pingel et al. requires an integer number of pixels per grid and because the subject invention, as defined by claims 4, 5, 10 and 11 requires a non-integeral number of pixels per grid, claims 4, 5, 10 and 11 are not subject to rejection under 35 U.S.C. § 103(a) in view of Pingel et al.

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Claims 1, 2, 7 and 8 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Pingel et al. and further in view of Minato. Applicant respectfully requests reconsideration of this rejection. Claims 1, 2, 7 and 8 include limitations similar to the limitation described above with reference to claim 4. Pingel et al. is described above and does not disclose or suggest this limitation. Minato concerns a method and apparatus for inspecting transparent objects in which a moiré patterned carrier is used to identify the defect. (See col. 4, lines 20-64. The moiré pattern is used only as a reference pattern, Minato does not address the problem addressed by the subject invention. Thus, Minato does not provide the material that is missing from Pingel. Consequently, claims 1, 3, 7 and 9 are not subject to rejection under 35 U.S.C. § 103(a) in view of Pingel and Minato.

In view of the foregoing amendments and remarks, Applicant requests that the Examiner reconsider and withdraw the objection to the specification and the rejection of claims 1, 2, 4, 5, 7, 8, 10 and 11.

Respectfully submitted,

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KNN/pb

Dated: September 29, 2008

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